

REMARKS

Claims 1, 3-12, 15, 16 and 18 are pending in the application, and independent claims 1 and 18 are hereby amended. Upon entry of this Amendment, claims 1, 3-12, 15, 16 and 18 will be pending, and are presented for examination.

Amendments to the Claims

Claims 1 and 18 are amended to more particularly point out and distinctly claim the subject matter that Applicants regard as the invention. Claims 1 and 18 are each amended to clarify that a plurality of electrophoretic particles of a display medium move during evolution of an optical state, and to clarify that a storage capacitor is in electrical communication with the display medium to apply an electric field to the display medium to evolve the optical state after an addressing event.

Support for the claim amendments may be found throughout the specification and claims as originally filed. See, e.g.: page 4, line 1; page 5, line 17 to page 6, lines 26-28; and page 12, line 10. Accordingly, Applicants submit no new matter is introduced by the above amendments.

Independent Claims 1 and 18 in View of Prior Rejections

Applicants address the rejection of independent claims 1 and 18 in the Final Office action mailed prior to filing the present Request for Continued Examination. Claims 1 and 18 were rejected as being unpatentable over U.S. Patent No. 6,100,951 to Oversluizen et al. ("Oversluizen") in view of U.S. Patent No. 5,961,804 to Jacobson et al. ("Jacobson"). Applicants respectfully submit that Oversluizen and Jacobson, each alone or in any reasonable combination, do not teach or suggest the subject matter recited by either amended independent claim 1 or amended independent 18 for the following reasons.

Oversluizen alone does not teach or suggest an electrophoretic display including a storage capacitor in electrical communication with a display medium having electrophoretic particles to apply an electric field to the display medium to evolve an optical state of the display medium after an addressing event, as recited by amended claim 1. In contrast to the

subject matter recited by claim 1, Oversluizen does not teach a use of a storage capacitor that is relevant to a display medium having electrophoretic particles.

Oversluizen teaches a display device including switching elements that are simple to manufacture. See, e.g., Oversluizen, column 2, lines 2-5. All examples of display devices disclosed by Oversluizen are directed at liquid crystal displays ("LCDs"). Moreover, only one of the LCD examples disclosed by Oversluizen includes a storage capacitor (C_s). See Oversluizen, column 9, line 36 (referring to "the FIG. 21 embodiment of an active-matrix LCD device.")

Oversluizen does not describe the purpose of the storage capacitor (C_s). Thus, one of ordinary skill in the arts would understand Oversluizen as describing that the storage capacitor (C_s) serves the same purpose as storage capacitors in prior LCD displays. See Oversluizen, column 9, lines 27-45, and FIG. 21. That is, one having ordinary skill in the display arts would understand Oversluizen as suggesting that the storage capacitor (C_s) can be used to provide the sustained voltage required to maintain a particular optical state of a liquid crystal material.

Oversluizen briefly mentions electrophoretic suspensions, but does not identify which of the disclosed examples, if any, are appropriate for combination with an electrophoretic suspension. See Oversluizen, column 1, lines 22-24; and see column 5, lines 31-34 (stating that "an alternative device...may by an electrophoretic suspension" without providing an example of the device.) In particular, electrophoretic materials, in contrast to liquid crystal materials, do not require application of a voltage to maintain a particular optical state. Therefore, Oversluizen would not motivate one having ordinary skill to combine Oversluizen's storage capacitor (C_s) with an electrophoretic particle display material. Thus, Oversluizen does not provide an enabling disclosure for the combination of electrophoretic particles and a storage capacitor for evolving the optical state of an electrophoretic display.

Jacobson alone does not teach or suggest all the features recited by amended claim 1. Further, Jacobson provides no motivation for one of ordinary skill in the art to combine the storage capacitor (C_s) of Oversluizen with an electrophoretic particle display medium.

Accordingly, Applicants submit that one of ordinary skill in the art, fully aware of the teachings of Oversluizen and Jacobson, would have no motivation to provide a storage capacitor in electrical communication with a display medium having electrophoretic particles to apply an electric field to the display medium to evolve an optical state of the display medium after an addressing event, as recited by claim 1.

For the same reasons as for claim 1, Applicants respectfully submit that Oversluizen and Jacobson, each alone or in combination, do not teach or suggest the subject matter recited by amended claim 18 because claim 18 specifically recites that the capacitor is in electrical communication with a portion of an electrophoretic display medium, specifically, a pixel. Therefore, amended independent claims 1 and 18 are patentable over Oversluizen in view of Jacobson. Claims 3-12, 15 and 16 depend directly or indirectly from claim 1. Because claim 1 is patentable over Oversluizen in view of Jacobson, Applicants submit that claims 3-12, 15 and 16 also are patentable over Oversluizen in view of Jacobson.

Dependent Claim 15 in View of Prior Rejections

Dependent claim 15 was rejected as being unpatentable over Oversluizen in view of Jacobson, and further in view of Hopper et al, IEEE Trans. Elect. Devices, Vol. ED-26, No. 8, page 1148 (1979). As discussed above, Applicants submit that amended independent claim 1 is in condition for allowance. Accordingly, claim 15, which depends directly from claim 1, also is in condition for allowance thereby rendering this rejection moot.

CONCLUSION

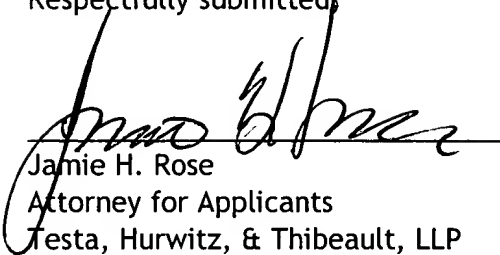
In view of the arguments presented herein, Applicants respectfully request examination of claims 1, 3-12, 15, 16 and 18, as amended, with claims 1, 3-12, 15, 16 and 18 proceeding to issue. The Examiner is invited to call the undersigned, if the Examiner believes that a telephone conversation could be helpful in expediting prosecution of the instant application.

Respectfully submitted,

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Marked Up Version of the Amended Claims

1. (Twice Amended) An [electronic] electrophoretic display comprising:

- a display medium comprising at least one capsule containing a plurality of electrophoretic particles dispersed in a fluid medium, wherein the plurality of electrophoretic particles move during evolution of an optical state of the display medium;
- a transistor having a data line, a gate electrode and a pixel electrode and comprising a layer of insulating material of the transistor situated between a first layer of conductive material of the transistor that forms the gate electrode and a second layer of conductive material of the transistor that forms the data line and pixel electrode, the transistor for applying an addressing voltage to the display medium by charging [via] the pixel electrode during an addressing event having a duration that is insufficient to fully evolve the optical state of the display medium; and
- a storage capacitor comprising a layer of insulating material of the storage capacitor situated between a first layer of conductive material of the storage capacitor and a second layer of conductive material of the storage capacitor, said storage capacitor in electrical communication with the display medium addressed by the transistor to apply an electric field to the display medium to continue evolving the optical state of the display medium after the addressing event ~~[for reducing a rate of voltage decay across the display medium]~~.

18. (Twice Amended) An [electronic] electrophoretic display comprising:

- a display medium comprising at least one capsule containing a plurality of electrophoretic particles dispersed in a fluid medium, wherein the plurality of electrophoretic particles move during evolution of an optical state of the display medium; and
- a storage capacitor comprising a layer of insulating material situated between a first layer of conductive material and a second layer of conductive material, said storage

capacitor in electrical communication with a pixel comprising a portion of the display medium to apply an electric field to the display medium to evolve the optical state of the pixel after a pixel addressing event ~~[for reducing a rate of voltage decay across the pixel]~~.